ABSTRACT OF THE DISCLOSURE

[0059] A system for automatically adjusting color gain of an ultrasound image. Image data passes through a wall filter and is processed into a time-gain compensation curve. Values of the time-gain compensation curve are multiplied with corresponding image data values to compensate for attenuation of image data values with increasing depth in a patient. The values used to generate the time-gain compensation curve may be averaged to reduce localized gain variations and produce an image with smoother intensity transitions. To reduce the effect of a time-gain compensation curve on overall system gain, values of the time-gain compensation curve may be scaled to produce equalized values for the time-gain compensation curve. Values of the time-gain compensation curve may be used to adjust front end gain of an ultrasound system to bring the front end gain within a few decibels of noise floor.